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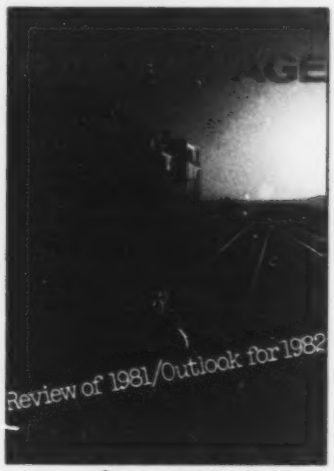
Review of 1981/Outlook for 1982

RAILWAY AGE

January 25, 1982

FEATURES



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Review of 1981

Outperforming a weak economy

Unexpected strength in coal, ore, and piggyback loadings—and a welcome, though somewhat diluted, dose of deregulation—helped the industry buck a recessionary trend.

If the bottom line is the real and true and final measure of an industry's performance, then the railroad industry performed relatively well in recessionary 1981.

Several factors contributed to a showing that was in many ways surprising. Traffic did not drop off to the degree that it has in past recessions. Rate increases were being granted without the long delays experienced in the past. Railroads had an ample supply of motive power and freight cars—in many cases, more than an ample supply. Fixed plant was in good shape, and it got better during '81 as spending for both property improvements and maintenance increased. Labor costs came under tighter control, though wage/benefit agreements negotiated late in the year contained wage and cost-of-living increases to be applied retroactively. Deregulation did not bring the upheaval it had brought to the airline and trucking industries, where freedom-of-entry provisions and day-to-day rate-cutting put new companies in business and left established ones gasping.

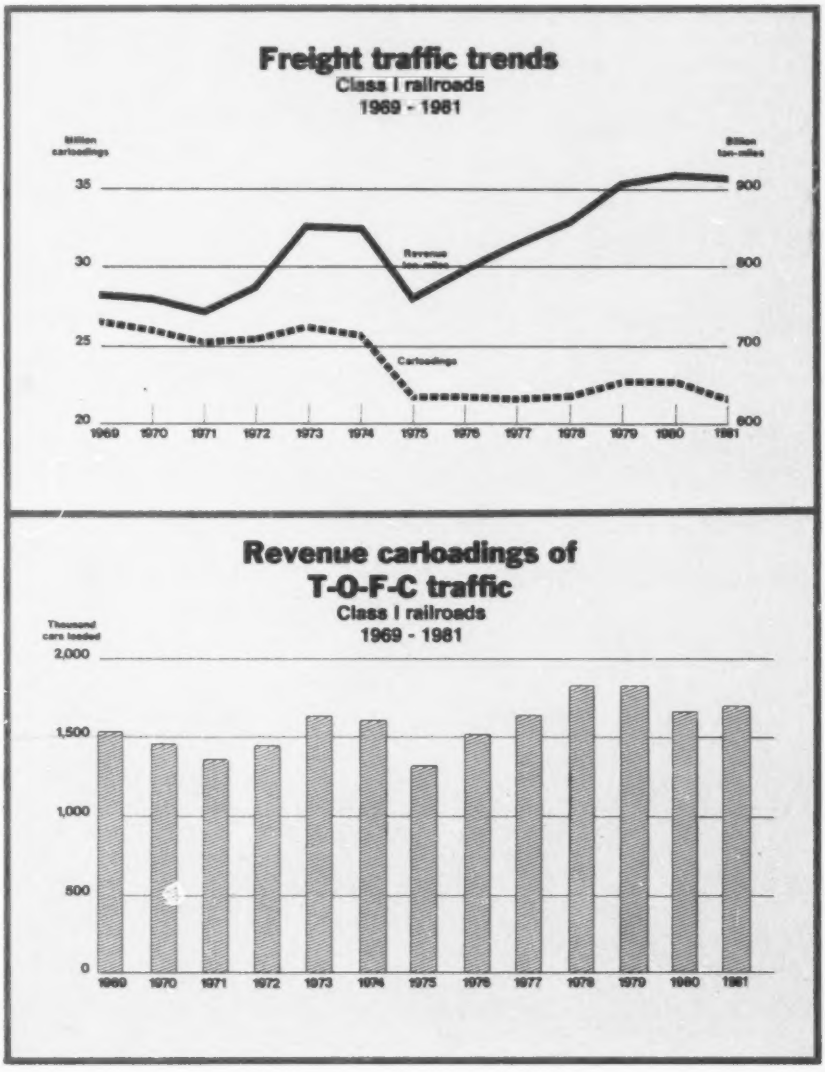
On the other hand, while traffic as measured in carloadings held up well, the total numbers were skewed by the strength of such bulk commodities as coal and iron ore. Declines were recorded in most commodity categories, and nobody could be sure when the trends would be reversed—not with such key industries as automobiles and housing still in a deep slump.

Fuel prices, a vital consideration to an industry that uses about four billion gallons of diesel fuel a year, tended to stabilize. The AAR's cost-index estimate did show an increase, but it was nothing like the year-to-year jumps recorded for the 1979-80 period.

Railroads continued to try to improve efficiency in the use of fuel, where they already had a substantial edge over motor carriers. Refinements in locomotive design helped. So did refinements in operating practices. And railroads and carbuilders alike began looking more seriously at aerodynamic factors in order to economize still further on fuel consumption.

But, while the year was a relatively good one for the railroad industry, it was a crusher for parts of the railway supply business. Locomotive and freight-car deliveries were little more than half the totals recorded in 1980, and new orders dropped sharply, to fewer than 20,000 for new freight cars. Component suppliers suffered both from the decline in new-equipment construction and from the high number of locomotives and cars in storage (because many roads were leaving repairs to stored equipment to the time when the equipment would once again be needed). On the other hand, old equipment was being retired at a faster-than-usual rate, and so an upturn in business would likely trigger more new orders as well as speeding up repair of stored equipment, once the surplus of stored-serviceable equipment was worked-off.

Railroad consolidation, meanwhile, was in a mark-time stage in '81. Burlington Northern/Frisco and Chessie System/



Carloadings by commodities: 1981 vs. 1980

Commodity	1981	1980		Incr./Decr. 1981 vs. 1980 Cars	Percent
Grain	1,351,946	1,573,315	D	221,369	14.1
Other farm products	224,043	235,841	D	11,798	5.0
Metallic ores	1,606,566	1,479,857	I	126,709	8.6
Coal	5,763,166	5,706,276	I	56,890	1.0
Crushed stone, gravel and sand	619,991	716,491	D	96,500	13.5
Nonmetallic minerals	675,014	770,912	D	95,898	12.4
Grain mill products	738,288	878,704	D	140,416	16.0
Food and kindred products	803,360	925,165	D	121,805	13.2
Primary forest products	938,728	1,002,033	D	63,305	6.3
Lumber and wood products except furniture	397,221	469,447	D	72,226	15.4
Pulp, paper and allied products	996,160	1,060,487	D	64 327	6.1
Chemicals and allied products	1,349,001	1,411,160	D	62,159	4.4
Petroleum products	268,980	296,752	D	27,772	9.4
Stone, clay and glass products	692,939	791,733	D	98,794	12.5
Coke	330,472	276,329	I	54,143	19.6
Metals and products	794,825	820,263	D	25,438	3.1
Motor vehicles and equipment	815,183	853,850	D	38,667	4.5
Waste and scrap materials	607,820	632,733	D	24,913	3.9
Forwarder and shipper association traffic	494,033	555,041	D	61,008	11.0
All other carloads	2,138,435	2,129,742	I	8,693	0.4
LCL traffic	11,922	11,685	I	237	2.0
Total Cars Loaded	21,618,093	22,597,816	D	979,723	4.3

Methods of shipping motor vehicles from factories 1970-1981

Year	Vehicles shipped	Highway %	Railroad %
1970	8,239,000	45.3	54.7
1971	10,638,000	47.5	52.5
1972	11,270,000	47.8	52.2
1973	12,637,000	48.0	52.0
1974	10,058,000	44.8	55.2
1975	8,985,000	46.4	53.6
1976	11,477,000	48.5	51.5
1977	12,639,000	49.3	50.7
1978	12,871,000	47.9	52.1
1979	11,456,000	50.1	49.9
1980	8,067,000	46.8	53.2
1981 (9 mos.)	6,230,000	48.0	52.0

Source: Motor Vehicle Manufacturers Association of the United States, except columns 2 and 3 for 1981 ACF estimated by AAR.

Seaboard Coast Line Industries came into being late in 1980; Norfolk & Western/Southern and Union Pacific/Missouri Pacific/Western Pacific were moving toward what should be decision-time in 1982.

Conrail showed a profit, according to generally accepted accounting principles, despite a sharp decline in carloadings. Amtrak? It fought off, for the most part, the best Administration budget-cutting efforts.

And overall, with deregulation in place and working (somewhat), with fixed-plant in excellent shape and with equipment ready to roll, the industry would appear to have come through '81 well-positioned for economic recovery.

Traffic/service

Last year was far from being a record-breaker for railroad freight traffic, with carloadings down for the second year in a row and with ton-miles doing no better than holding about even with 1980 totals.

But, there were bright spots. Coal loadings were up, despite a lengthy coal strike early in the year and a slackening of demand late. TOFC/COFC loadings, normally among the hardest-hit in a recession, finally inched up above 1980 levels in August and closed the year with a respectable increase. Piggyback services, meanwhile, were deregulated, and the ICC gave its approval to a plan for multilevel auto-rack pools, a plan which should produce better utilization of equipment which is among the most expensive in the car fleet.

Carrier/customer contracts became more popular, contracts in some instances covering equipment-supply and service matters as well as volume and freight charges. Contracts of a different sort, initiated by Norfolk & Western and joined in in somewhat similar fashion by Chessie System, helped to break the traffic jam of colliers standing off Hampton Roads, Va., waiting to take on coal from NW and Chessie piers.

Perhaps the most controversial matter involving service in '81 involved Santa Fe and OT-5, the AAR provision covering acceptance of non-railroad cars for loading. Looking at a surplus of railroad-owned equipment and at increased payments for use of non-railroad cars, Santa Fe decided to explore the possibility of cancelling OT-5 authorities in 1982—while a shipper/carbuilder/lessor committee (SCOT-5) was moving in the opposite direction, seeking unlimited use of non-railroad cars. The basic controversy remained unresolved at yearend, but in the meantime Santa Fe had pulled back, deciding to continue to accept use of private covered hopper cars for grain shipments, cars which already had OT-5 authority. Talks would continue, the road said, in an effort to cope with problems of car surpluses and poor utilization of both railroad and private equipment.

Freight rates

Rules issued by the ICC last April allowed for rate adjustments to be made on a quarterly basis in order for railroads to make up for inflationary cost increases. Subsequent increases permitted were 1.7% in June, 2.8% in July and 1.4% in October, with a further boost of as much as 4.7% to be made effective Jan. 1, 1982, with much of this last increase reflecting increased costs because of the pattern of wage/benefit settlements established late in 1981.

Under existing law, railroads and the ICC use a cost recovery index as a basis for both individual and general adjustments, with the index applied in lieu of the evidentiary proceedings previously

required. General increases will be available to the carriers into 1982; the Commission may elect to eliminate them after April 1, but in any event under the Staggers Rail Act of 1980 such increases must be eliminated by Jan. 1, 1984.

As for rate adjustments being made by individual roads, activity in three areas dominated in 1981. More and more railroads were entering into more and more contracts with more and more customers, contracts obligating carriers and customers with respect to such factors as volume, rate, service and equipment supply. Rate surcharges were applied by some roads on a number of kinds of traffic in order to boost the traffic out of the unprofitable or marginal category. And, especially in the West, piggyback shippers benefitted—at least in the short run—by a series of competitive rate cuts.

Financial results

Early-on, it became apparent that the railroad industry generally would not suffer the hardships in the 1980-81 recession that it had suffered in past recessions during the 1970s. Ordinary income for 1980, reported last April, showed a substantial increase from 1979 levels, and quarterly reports for '81 showed the trend continuing.

For first-quarter '81, ordinary income was $636.4 million, up from $263 million in 1980; for the first half of '81, earnings totaled $977.3 million, up from $438.5 million in the comparable 1980 period. Final figures on 1981 are not yet in, but for the 12 months ended Sept. 30, net income after fixed charges was estimated at $2.008 billion, which worked out to a rate-of-return on investment after depreciation of 5.15%, up from 4.13% in calendar 1980.

But, while rate-of-return was moving in the right direction, it still fell well under what the ICC viewed as an adequate return based on the cost of capital. For example, after looking at results from 37 railroads for 1980—a year for which it regarded adequate return at 12.1% or better—the Commission reported in September that it found only three carriers at or above that percentage; Fort Worth & Denver, Clinchfield and Pittsburgh & Lake Erie.

Meanwhile, every index of expense items was showing an increase for 1981. With 1967=100, the index for wage rates and supplements was estimated at 374.1, the index for fuel at 1,097.3 and the index of wage rates and all material prices (including wage supplements) at 414.6.

Capital expenditures

Capital spending by Class 1 railroads dropped last year by upwards of 8% overall from 1980's total of more than

Freight and passenger traffic 1970-1981

Year	Revenue carloadings (thousands)	Piggyback carloadings (thousands)	Revenue ton-miles (millions)	Revenue passenger-miles (millions)
1970	27,160	1,450	764,809	10,740
1971	25,266	1,356	739,743	8,833
1972	26,105	1,448	776,746	8,558
1973	27,338	1,631	851,809	9,295
1974	26,184	1,610	850,961	10,333
1975	23,218	1,308	754,252	9,934
1976	23,457	1,506	794,059	10,304
1977	23,173	1,689	826,292	10,293
1978	23,355	1,841	858,105	10,222
1979	23,892	1,858	913,669	11,200
1980	22,598	1,661	918,621	10,995
1981	21,618	1,704	e915,000	n.a.

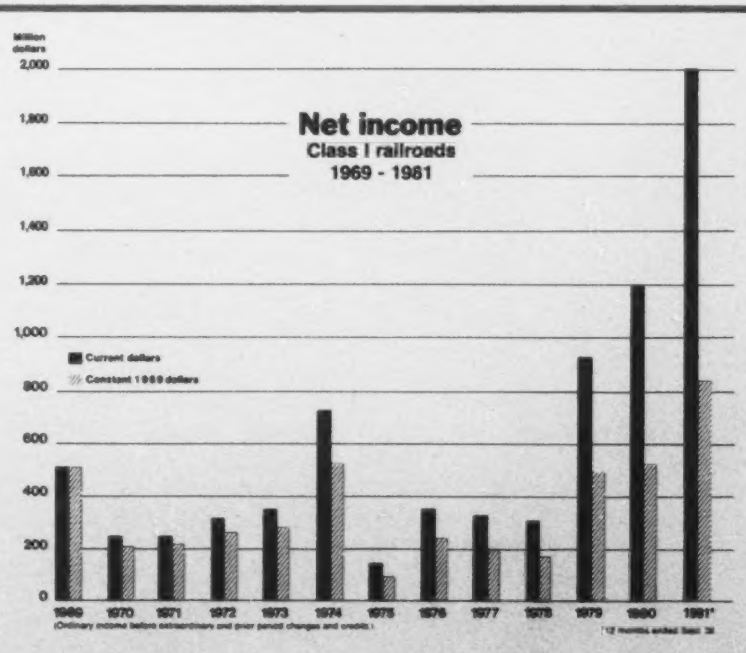
e Estimated
n.a. Not available

Note: Piggyback carloadings shown above include mail and express. Revenue passenger-miles include National Railroad Passenger Corp. (Amtrak) beginning with year 1971 and Auto-Train Corp. for years 1972-77.

Operating revenues 1970, 1980, 1981

	1970 (millions)	1980 (millions)	12 mos. to 9/30/81 (millions)
Freight	$11,106	$26,200	$28,758
Passenger	420	438	521
All other	466	1,464	1,441
Total	**11,992**	**28,103**	**30,721**

Note: Mail and express included in freight revenue.



Railroad cost of capital

	1979 Ex Parte-393	1980 Ex Parte-416
1. Current cost of debt	9.0%	10.0%
2. Current cost of equity	13.5	13.5
3. Debt/equity ratio	40:60	40:60
Weighted average cost of capital to be compared to the rate of return on net investment	11.70	12.10

Source: ICC Decisions

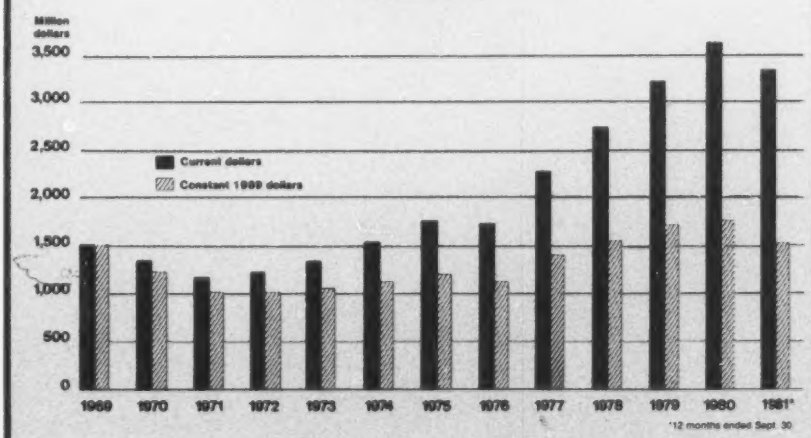
Net railway operating income, rate of return on net investment and net income 1970-1981

Year	Net railway operating income *a* (millions)	Rate of return on investment after depreciation *a* (millions)	Net income after fixed charges *b* (millions)	Net income in constant 1969 dollars (millions)*
1970	$486	1.73%	$227	$215
1971	595	2.12	247	223
1972	654	2.34	319	277
1973	650	2.33	359	295
1974	768	2.70	730	551
1975	351	1.20	144	99
1976	452	1.60	355	233
1977	343	1.24	326	202
1978	427	1.52	307	177
1979	837	2.87	938	500
1980	1,312	4.13	1,192	583
12 mos. to 9/30/81	1,712	5.15	2,008	918

a After provision for deferred taxes beginning in 1971.
b After provisions for deferred taxes beginning in 1971 and including equity in undistributed earnings of affiliated companies beginning in 1974.
* Implicit price deflator for GNP, used to develop constant dollars, was revised in Jan. 1981.

Note: Statistics shown above and elsewhere in the tables are for Class I line-haul railroads, excluding National Railroad Passenger Corp. (Amtrak) and Auto-Train Corp., unless otherwise indicated.

Capital expenditures
Class I railroads
1969 - 1981



$3.6 billion, even though expenditures for fixed-property improvements went up by about $200 million. In 1980, railroads spent almost twice as much for equipment as they did for plant improvements, but in '81 the gap narrowed considerably and there were indications that in 1982 fixed-plant spending might exceed equipment spending.

For the 12 months ended Sept. 30, 1981, total expenditures were estimated at $3.323 billion, not including spending from non-railroad sources. For that same period, AAR estimated the excess of capital expenditures over retained funds at $534 million, the lowest "margin" since 1974.

Including equipment additions accounted for by all sources, AAR put 1981 freight-car installations at about 45,000 and locomotive installations at about 750. In each case, the totals were little more than half of what they were in 1980.

New technology

Freight-car manufacturers didn't use all of their production capability last year. But their innovative capability? That was a different story: In few recent years has there been such an outpouring of innovation in freight-car design and construction. What did '81 bring?

—The Glasshopper, the prototype filament-wound fiberglass covered hopper car unveiled jointly by ACF, Southern Pacific and Cargill. Among its advantages: Lighter weight, resistance to corrosion, lower labor costs in construction because of the filament-winding technique. SP put Glasshopper out for test while ACF began looking toward the building of a second prototype, and the tests have gone well.

—The Algola, virtually an all-aluminum (except for trucks and running gear) gondola for unit-coal-train service. The carbody was built in Europe and imported by Alusuisse of America, with Santa Fe providing the test opportunity in its York Canyon unit-train operation. Unlike aluminum cars which have been in U.S. service, the Algola carbody is fabricated of wide extruded aluminum panels. It's lightweight, allowing for more payload than even the lightest steel car while holding to the 263,000-pound-on-rail limit; automated construction techniques would reduce the labor-cost factor; and the combination of long carbody life and high residual value could also work to overcome any burden of higher initial cost. At about 40,000 miles, late last year, the prototype underwent a thorough inspection, and the verdict was: No problems. Currently, Algola is scheduled to keep on running on Santa Fe at least until it hits 75,000 miles.

—Innovation in intermodal railcar equipment that just wouldn't stop. Bi-Modal Corporation's RoadRailer made its debut in regular revenue service on Illinois Central Gulf. Production-model ACF double-stack container cars went into operation on SP. Santa Fe built a container version of its highly successful Ten-Pack articulated TOFC car. Trailer Train put 100 four-platform, single-axle-truck 4-Runner cars in service with Union Pacific, these cars also built by ACF. Trailer Train also contracted for three prototypes, a version of the 4-Runner to be built by Pullman Standard and articulated cars to be manufactured by Youngstown Steel Door and Whitehead & Kales. Budd had extensive tests performed on its LP-2000 articulated well-type trailer/container car. Berwick planned to come up with a container car early in '82. Itel Corp., which had acquired rights to the Ten-Pack design, made its first sale, two 10-unit cars for test on Burlington Northern. And several other designs were coming along, in one stage or another of development as both oldline and new suppliers invested in the potential of TOFC/COFC.

Prices and revenue averages — 1968-1981

Year	Consumer price index (1967 = 100)	Producer price index for railroad equipment (1967 = 100)	Revenue per ton-mile (cents)	Revenue per passenger-mile (cents)
1968	104.2	103.1	1.310	3.389
1969	109.8	108.8	1.347	3.608
1970	116.3	115.1	1.428	3.914
1971	121.3	121.1	1.593	4.306
1972	125.3	128.7	1.618	4.747
1973	133.1	134.7	1.617	4.756
1974	147.7	163.8	1.853	5.207
1975	161.2	201.2	2.041	5.396
1976	170.5	216.7	2.191	5.744
1977	181.5	233.5	2.286	5.916
1978	195.3	252.7	2.358	5.947
1979	217.7	277.3	2.599	6.270
1980	247.0	313.1	2.852	7.336
1981 est.	272.5	340.5	3.100	n.a.

n.a. - Not available.
Note: Revenue per passenger-mile figures include Amtrak statistics beginning with 1971 and include Auto-Train for years 1972-77.

Management/labor

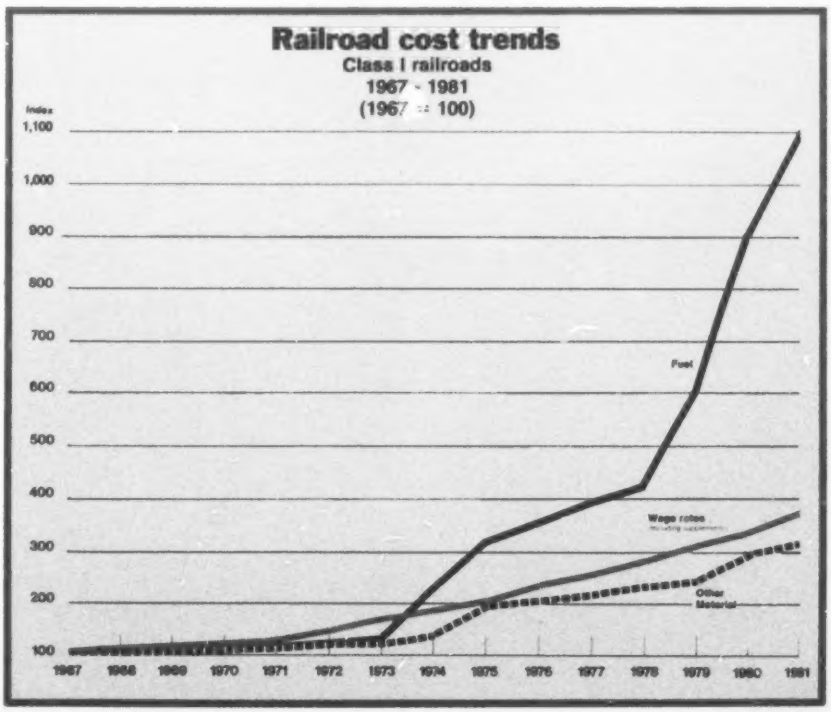
For rail management and the rail labor organizations, 1981 was a year of substantial accomplishment, after a slow start.

Labor served its contract demands shortly after the first of the year, for changes to become effective April 1. But, by agreement, management and labor first tackled the recurring problems of the Railroad Retirement system, problems that were not solved until August with passage of the Economic Recovery Tax Act of 1981 by Congress. Included in the legislation were various provisions affecting the system: Railroad Retirement would have limited borrowing authority from the U.S. Treasury against amounts owed to the system under financial interchange arrangements with Social Security; taxes paid by employers were increased by 2.25% while a new 2% tax was levied upon employees; and a number of benefit adjustments were made.

With that out of the way, negotiators got down to bargaining on the contract demands, and agreement was not long in coming. Individual unions' wage notices varied, with the most common proposal calling for increases of 20% each year for three years. As usual, labor softened these demands, and the agreements that resulted called for basic wage increases of 2% retroactive to April 1, 1981, 3% retroactive to Oct. 1, 1981, 3% effective July 1, 1982 and 3% effective July 1, 1983; continuation of cost-of-living-/allowance provisions; and a number of improvements in various fringe benefits.

At yearend, seven unions—the Clerks, Maintenance of Way Employees and five shopcraft unions—had ratified the pact and the Signalmen had initialed it. Still on the outside, and in mediation, were the operating unions, apparently hung up over carrier proposals for work-rule changes.

Meanwhile, Conrail and its labor organizations were working to get their house in order. The 285 separate labor agreements which CR inherited were consolidated into just 26 agreements; employees represented by most organ-



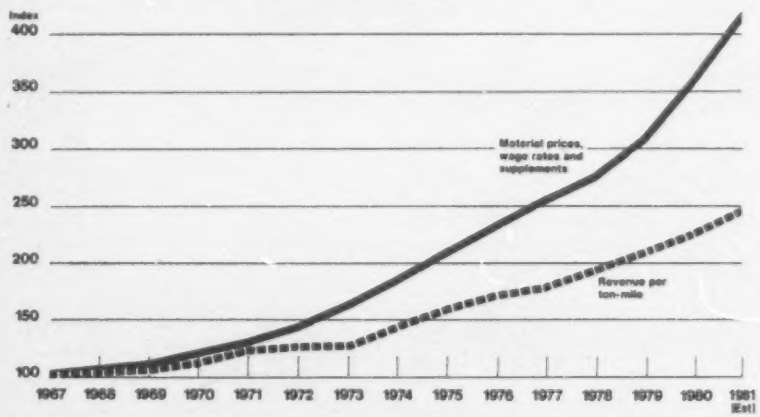
Condensed income account 1970, 1980, 1981

	1970 (millions)	1980 (millions)	12 mos. to 9/30/81 (millions)
Total operating revenues	$11,992	$28,103	$30,721
Total operating expenses[1]	11,478	26,250	28,277
Income taxes on ordinary income[2]	88	291	63
Provision for deferred taxes	–	279	699
Net railway operating income	486	1,312	1,712
Net ordinary income	227	1,192	2,008
Net income in constant 1969 dollars	215	583	918

Note: Data based on the new Uniform System of Accounts (U.S.O.A.), effective Jan. 1, 1978.
1. Operating expenses include rents and taxes other than income taxes.
2. Data for 1980 and 1981 include a small amount of state taxes.

Revenue and cost trends

Class I railroads
1967 - 1981
(1967 = 100)



Trends in railroad fuel prices[a] (cents per gallon)

Year	U.S.	East	South	West
1970	9.92	10.13	10.62	9.68
1971	10.29	10.70	10.98	9.92
1972	10.52	10.92	11.27	10.14
1973	12.26	12.74	12.94	11.84
1974	24.43	25.19	25.06	24.01
1975	28.91	30.05	29.75	28.09
1976	31.44	32.55	32.31	30.67
1977	34.99	36.81	36.18	33.77
1978	36.54	38.48	37.50	35.36
1979	54.47	55.06	52.33	54.91
1980	81.64	82.28	79.33	82.07
1981	98.57	101.41	99.41	96.99

[a]Yearly averages based on AAR Fuel Index.

izations approved a wage-deferral agreement amounting to about $200 million a year for three years; and Congress did its part by repealing the labor-protection program established under the 3R Act and replacing these benefits with a limited federally-funded severance and supplemental-unemployment program.

Conrail

Conrail started the new year with a new owner, the U.S. Department of Transportation, which took control of 80% of the road's Series B preferred and common stock. And the new owner promply indicated an interest in selling off CR's facilities and services to other railroads.

For its part, CR responded by calling attention to its own efforts to reduce its costs and by giving Congress specific recommendations with respect to labor-protection costs, commuter operations and abandonments. A number of these recommendations were reflected in what became the Northeast Rail Service Act of 1981: The labor-protection program set up under the 3R Act was repealed; procedures were established for the transfer of money-losing commuter operations to Amtrak or to local authorities by Jan. 1, 1983; and abandonment procedures were streamlined. The Act also gave CR management two profitability deadlines: In June 1983 there is to be a determination made as to whether CR can be profitable, and measurements are to be made between June and October 1983 to determine if it actually achieved profitability. If CR passes both of those tests, it could only be sold as an entity at least until June 1984.

While the debate was continuing, CR kept plugging away. In 1980, the road lost $244 million and in 1981 it suffered a 9% decrease in carloadings—but still, yearend-1981 figures were expected to show a "modest" profit on the basis of generally-accepted accounting principles. In addition, CR did not require federal funding in the third and fourth quarters of '81, the first six-month period in the road's history when it operated without drawing on federal monies.

Several factors contributed to the improvement. For one, federal investment of almost $3.3 billion to rehabilitate plant and equipment produced a freight-service operation "as good as that provided by virtually any railroad in the country." For another, CR concentrated in '81 on cost-cutting and on sizing plant and equipment capacity and workforce to more nearly match current and projected traffic levels. Rail labor cooperated, for the most part: CR was finally able to consolidate its inherited labor agreements into 26 contracts; and em-

ployees represented by most unions on CR agreed to a wage-deferral plan covering a three-year period.

In addition, CR was building its marketing/sales strategy around two goals, first to retain and increase desirable traffic, and second to eliminate losses on unprofitable business. Carrier/customer contracts became an important part of the program, and by yearend CR had about two dozen contracts in effect.

Competitive transportation

While industry spokesmen continued to beat the drums for "competitive equity" in 1981, the Administration and Congress seemed in no hurry to beef up highway or waterway user fees. Coal-slurry-pipeline proposals continued to make the rounds in Washington, but here the Administration did express opposition to a federal law granting eminent domain for pipelines, noting that such decisions should be made by the states involved.

On specific waterways projects, further funding for the Tennessee-Tombigee project was voted by Congress, but by extremely narrow margins in both houses; earlier, the total cost for the waterway had been estimated at $3 billion, and critics argued that as much as $2 billion might be saved if construction were halted. Ironically, at about the time the Senate approved funding for Tenn-Tom, rail industry sources were quoting from a new federal study summary which supported imposition of inland waterway user charges; adding to the irony was the fact that as matters stood, users of the Tenn-Tom would not even be subject to the schedule of user fees which had been imposed in 1978. Then, there was the matter of Lock and Dam 26 on the Mississippi River, a project which railroads and environmental interests have been fighting for years. That fight was apparently ended late in '81 when the U.S. Supreme Court let stand a lower-court ruling which allows the Army Corps of Engineers to proceed with the $44-million replacement of the facility at Alton, Ill.

Deregulation

On the basis of a year's experience under deregulation, it appeared that the railroad industry was handling dereg in considerably better fashion than either the airline or the motor-carrier industry, both of which got dereg earlier and have had more trouble coping with it.

Railroads were not without their problems, however. Uncertainty remained as to what can and cannot be discussed between and among carriers, now that antitrust immunity has been lifted. Surcharges, imposed unilaterally, became a problem for some roads when

Annual rates of inflation 1980-1981
(1967 = 100)

Month	Producer price index	Consumer price index	Spot price index of railroad material prices and fuel
1980			
January	254.9	233.3	430.9
February	260.2	236.5	—
March	261.9	239.9	—
April	262.8	242.6	457.6
May	264.2	245.1	—
June	265.6	247.8	—
July	270.4	248.0	468.8
August	273.8	249.6	—
September	274.6	251.9	—
October	277.8	254.1	470.8
November	279.1	256.4	—
December	280.8	258.7	—
1981			
January	283.5	260.7	491.0
February	286.9	263.5	—
March	289.6	265.2	—
April	292.8	266.8	534.9
May	293.7	269.1	—
June	294.5	271.4	—
July	296.0	274.6	532.0
August	296.2	276.5	—
September	295.5	279.1	—
October	296.0	279.7	529.5
Annualized rate of inflation 10/80 - 10/81	6.6%	10.1%	12.5%

Employees and their compensation 1969 - 1981

Year	Number of employees 1	Number of employees 2	Total payroll (000s)2	Average annual earnings per employee 2	Average Hourly rate 2	Straight-time Hourly earnings 2
1969	—	578,227	$5,362,754	$ 9,274	$3.70	$4.00
1970	—	566,282	5,711,280*	10,086*	4.05*	4.35*
1971	544,497	544,333	5,999,968*	11,023*	4.52*	4.84*
1972	527,235	526,061	6,424,920	12,213	4.94	5.32
1973	524,422	520,153	7,083,338	13,627	5.43	5.83
1974	533,277	525,177	7,475,834	14,235	5.72	6.16
1975	494,348	487,769	7,474,000*	15,324*	6.30*	6.77*
1976	496,491	482,882	8,278,400	17,144	6.96	7.49
1977	501,389	482,731	8,939,400	18,518	7.51	8.15
1978	491,254	471,519	9,700,600	20,573	8.25	8.85
1979	502,802	482,789	10,903,887	22,474	9.02	9.66
1980	480,410	458,994	11,318,453	24,659	9.97	10.74
1981 est.	457,000	436,000	11,902,800	27,300	11.05	11.90

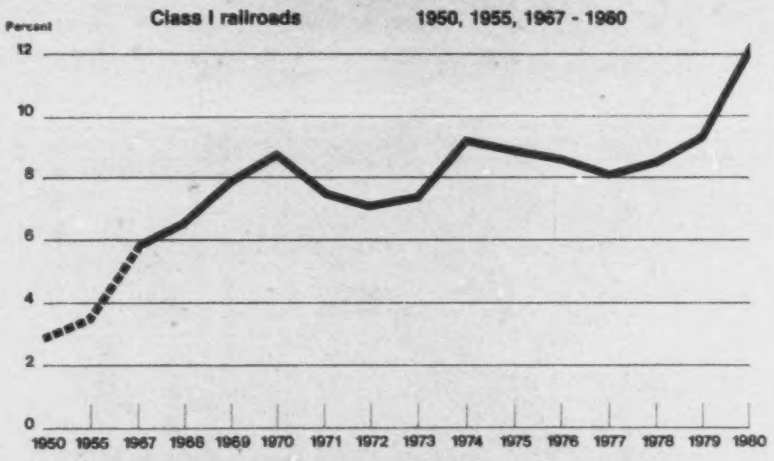
* Adjusted to include retroactive increases.

1 Includes Amtrak beginning in 1971 and Auto-Train for years 1972-77.

2 Excludes Amtrak and Auto-Train.

Average interest rates on equipment obligations issued

Class I railroads 1950, 1955, 1967 - 1980



New and rebuilt equipment installed 1970-1981

Year	Freight cars	Passenger-trains cars	Diesel-electric units
1970	75,136	318	1,093
1971	60,618	281	1,276
1972	49,939	347	1,577
1973	59,006	92	1,384
1974	66,824	100	1,395
1975	70,883	272	840
1976	53,205	358	567
1977	53,646	158	992
1978	70,293	44	1,378
1979	96,504	116	1,978
1980	86,628	152	1,483
1981 est.	45,000	n.a.	750

n.a. Not available
Note: Freight-car installations include cars of all railroads and private car lines. Passenger-train car and diesel-electric unit installations include Amtrak beginning with the year 1972 and Auto-Train for the years 1972-1977.

Railway current ratio

Dec. 31	Current assets (millions)	Current liabilities[1] (millions)	Current ratio
1970	$3,582.5	$3,523.9	1.0
1971	3,585.9	3,647.8	1.0
1972	3,611.6	3,672.3	1.0
1973	4,055.9	3,898.0	1.0
1974	4,553.2	4,333.7	1.1
1975	4,640.8	4,572.9	1.0
1976	5,292.8	4,950.1	1.1
1977	5,985.7	5,414.6	1.1
1978	6,873.5	6,270.8	1.1
1979	7,779.6	7,224.5	1.1
1980	8,676.4	7,779.0	1.1
9/30/81	9,212.2	7,916.5	1.2

[1] Includes debt due within one year.

those surcharges involved interlined traffic. Price-cutting was the flip-side of that problem, and nowhere was it more prevalent than on piggyback services, which have not been all that profitable to begin with; especially on piggyback, rate warfare seemed to be resulting more in traffic-swapping between railroads than it did in luring more traffic off the highways (although TOFC/COFC loadings were in fact up for the year while total revenue freight carloadings were down).

Summing up the first-year results, AAR President William H. Dempsey said that the industry was "generally satisfied" with the Staggers Rail Act of 1980, saying that its "rationale is sound, and we remain convinced that it holds out the only hope for an economically viable railroad industry."

Reorganization

Both Boston & Maine and Milwaukee Road made progress toward reorganization in 1981, and there was at least the possibility that each would eventually be acquired as an operating railroad.

B&M would presumably become a part of a New England combine to be put together by Timothy Mellon and Guilford Transportation Industries (a combine that would also include Maine Central and Delaware & Hudson).

Milwaukee Road, meanwhile, got an expression of interest from Grand Trunk Corp. shortly after its reorganization plan was filed with U.S. District Court in Chicago. What Milwaukee has in mind is operation of a regional core system which could conceivably begin to show a profit by the end of 1983. What would integration of Milwaukee give Grand Trunk and parent Canadian National? A connection between two elements of GTC, Grand Trunk Western and Duluth, Winnipeg & Pacific; routes west and north from Chicago to Kansas City, the Twin Cities and Duluth; entry into traffic-orginating territory in the upper Midwest; and another gateway to the Southeast via Louisville.

For the other major bankrupt, meanwhile, 1981 did not shape up as a year of great progress. Other carriers were continuing to express interest in operating substantial parts of Rock Island on a permanent basis—Katy, for example, and Santa Fe—but nothing final had been decided by yearend.

Merger/consolidation

The consolidations actually effected during 1981 were not big ones—for example, Santa Fe/Toledo, Peoria & Western; Grand Trunk Western/Detroit & Toledo Shore Line; Southern/Kentucky & Indiana Terminal.

Burlington Northern/Frisco was

already in place as '81 began, as was the CSX merger which brought together Chessie System and Seaboard Coast Line Industries (Family Lines).

But '81 saw the ICC moving ever closer to decision on a couple of other major mergers, Norfolk & Western/ Southern and the consolidation of Union Pacific, Missouri Pacific and Western Pacific. And '81 also saw what could be the beginning of consolidation in New England, with the possibility that Maine Central, Boston & Maine and Delaware & Hudson would be put together under the banner of Guilford Transportation Industries.

Passenger service

Not long after the Reagan Administration came into power, it became clear that one of its budget-cutting priorities would involve deep cuts in funding for Amtrak, cuts which Amtrak said would pretty much restrict service to the Northeast Corridor. The Administration, however, soon found Congress to be of another mind, thanks in large part to expressions of support for Amtrak from the voters. As a result, Amtrak wound up with $735 million for FY 1982 and $788 million for FY 1983; interest payments to the government were also deferred, while the formula for paying for 403-b service was changed so as to provide for a greater eventual contribution from the states involved.

While Amtrak was under pressure from the Administration to drop money-losing intercity services, it faced the real possibility of having to pick up money-losing commuter operations from Conrail; under the Northeast Rail Service Act of 1981, procedures were set up for the transfer of CR commuter services to Amtrak or local authorities by the first of next year.

Index of wage rates and material prices 1968 - 1981

(Average 1967 = 100)

Year	Wage index	Wage rates and supplements	Fuel	Other material	Total material	Wage rates and prices	Wage rates and prices including supplements
1968	105.1	106.3	103.5	102.6	102.7	104.7	105.7
1969	112.2	113.6	106.7	105.6	105.8	110.9	112.3
1970	122.7*	125.6*	110.5	109.4	109.7	120.2*	123.0*
1971	136.8*	139.4*	114.6	113.5	113.7	131.2*	133.7*
1972	149.5	153.4	117.1	118.7	118.1	141.8	145.6
1973	164.4	173.9	136.5	122.9	126.7	155.2	163.5
1974	173.4	189.1	272.0	142.1	178.9	174.7	186.8
1975	190.8*	207.1*	321.9	190.2	227.2	202.2*	212.6*
1976	210.7	232.0	350.1	203.2	244.5	221.3	235.4
1977	227.3	251.6	389.6	217.2	265.3	239.2	255.4
1978	250.0	276.5	406.9	230.6	279.9	259.4	277.4
1979	273.2	303.8	606.4	252.5	347.8	296.5	315.9
1980	304.1	333.2	908.8	291.4	455.1	351.4	366.7
1981 (prel.)	332.0	374.1	1097.3	314.8	521.5	391.3	414.6

*Reflects inclusion of retroactive wage increases.

Capital expenditures and retained funds 1970-1981

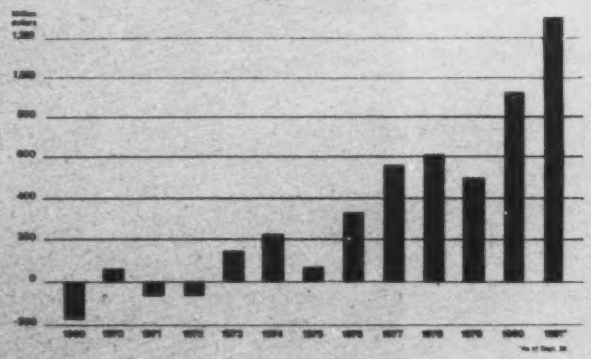
Year	Gross capital expenditures: Rolling stock (millions)	Gross capital expenditures: Other facilities (millions)	Gross capital expenditures: Total (millions)	Retained funds* (millions)	Excess of capital expenditures over retained funds (millions)
1970	$ 993	$ 358	$1,351	$ 618	$ 733
1971	864	314	1,178	784	394
1972	848	368	1,216	923	293
1973	893	449	1,342	964	378
1974	1,038	527	1,565	1,091	475
1975	1,303	486	1,790	622	1,168
1976	1,175	550	1,725	683	1,042
1977	1,540	751	2,291	763	1,527
1978	1,883	855	2,738	727	2,011
1979	2,285	1,039	3,323	1,390	1,933
1980	2,346	1,275	3,621	1,822	1,799
12 mos. to 9/30/81	1,856	1,467	3,323	2,789e	534e

*Retained funds represent income before extraordinary items, plus deferred taxes and depreciation and retirement charges, less cash dividends and equity in undistributed earings of affiliated companies.

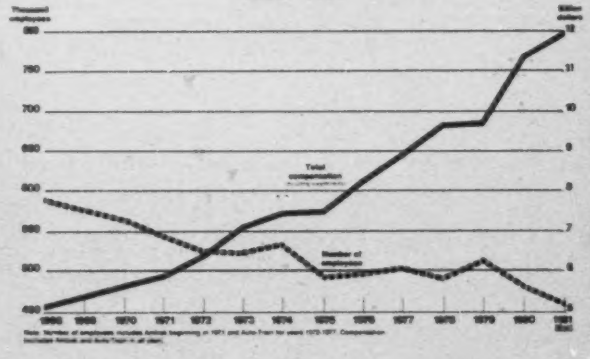
Note: Capital expenditures of Class I railroads do not include expenditures for railroad equipment made by private car companies and lessors.

e -- Estimated

Net working capital
Class I railroads
1969 - 1981



Employment and compensation
Class I railroads
1968 - 1981



Review of 1981
Car and locomotive orders

1981 FREIGHT-TRAIN CAR ORDERS

Purchaser	No.	Type	Capacity (tons)	Order Date	Delivery Date	Builder
Alaska Railroad	25	Hopper	100	Jan.	May	Chessie
	25	Hopper	100	Dec.		
Allied Chemical Corp.	17	Tank	100	Apr.	4th qtr.	General American
Atchison, Topeka & Santa Fe	25	Caboose	—	Jan.	Aug.-Sept.	Intl. Car
	50	Tank	100	May	Mar.-May	Trinity Ind.
Badische Corp.	14	Tank	100	Mar.	1st qtr. '82	General American
Bangor & Aroostook	150	Box	70	June	Sept.	Berwick
	83	Box	70	Oct.	Dec.	Berwick
California Rail Car	4	Tank	100	Nov.	4th qtr.	General American
Chessie	213	Hopper	100	—	Apr.	Co. shops
Chicago Freight Car Leasing Co.	150	Cov. hopper	100	Jan.	May	Thrall
	10	Cov. hopper	100	Oct.	Oct.	Portec
	10	Cov. hopper	100	Nov.	Nov.	Portec
Delaware & Hudson	148	Box	70	—	May	Pullman Std.
Denver & Rio Grande Western	2	Air side dump	100	Dec.	Dec.	Difco
Dow Chemical	15	Tank	100	Sept.	4th qtr. '82	General American
	20	Tank	100	Sept.	2nd qtr. '82	General American
Draycutt Corp.	1	Tank	100	June	1st qtr. '82	General American
Evans Lease Fleet	168	Misc.	100	Jan.	Sept.-Oct.	Evans
	350	Refrig.	70	Feb.	Mar.-July	Evans
	150	Tank	100	1981	1981	Evans
	160	Tank	100	1981	1982	Evans
	200	Box	70	Apr.	July-Sept.	Evans
	300	Gondola	100	Sept.	Sept.-Dec.	Evans
	200	Hopper	100	Nov.	1982	Evans
	200	Cov. hopper	100	Nov.	1982	Evans
Florida East Coast	14	Auto racks	90	Nov.	Dec.	Whitehead & Kales
FMC Corp.	1	Cov. hopper	100	June	Dec.	FMC
Gulf States Utilities Co	605	Gondola	100	Feb.	Sept.-Nov.	Bethlehem
Itel Rail	20	Intermodal flat	—	Nov.	Mar. '82	FMC
Maine Central	200	Box	70	Apr.	July	Berwick
	1	Caboose	—	Apr.	Sept.	Intl. Car
Metropolitan Sanitary Dist of Greater Chicago	75	Air side dump	100	Sept.	Sept. '82	Difco
Missouri-Kansas-Texas	25	Tank	100	Mar.	Sept.	Trinity Ind.
Missouri Pacific	150	Box	100	Sept.	Jan. '82	PACCAR
	100	Caboose	50	Sept.	Oct.	MoPac
	50	Cov. hopper	100	Nov.	Apr. '82	General American
	319	Auto racks		Sept.	Sept.	Portec
Multi-Systems Intl.	100	Ballast (Twin-Hopper)	100	Feb.	Apr.	Bethlehem
NASA	1	Tank	100	May	1st qtr. '82	General American
North American	225	Cov. hopper	100	Apr.	Oct.	FMC
Pittsburgh & Lake Erie	400	Gondola	100	Aug.	Dec. '81-Feb. '82	Greenville
Railbox Co.	140	Box	—	—	—	FMC
Railgon	1,500	Gondola	—	—	—	Pullman Std.
	387	Gondola	—	—	—	Thrall
	303	Gondola	—	—	—	Bethlehem
	40	Gondola	—	—	—	Berwick
	1	Intermodal (3-unit)	—	—	1982	Youngstown
	1	Intermodal (3-unit)	—	—	1982	Whitehead & Kales
Southern	1,000	Triple hopper	100	Oct.	1st & 2nd qtrs. '82	Greenville
	100	Ballast	100	Nov.	2nd qtr. '82	United American
	500	Intermodal trailer	—	—	—	Fruehauf Corp.
Southern Pacific and St. Louis Southwestern	250	Hopper	100	Apr.	Sept.-Nov.	Ortner
	42	Artic. flat	270	Apr.	July-Nov.	ACF
Timken Co.	3	Air side dump	77	June	Nov.	Difco
Trailer Train Co.	31	Bulkhead flat	—	—	—	Thrall
	101	Intermodal (4-unit)	—	—	—	ACF
	1	Intermodal (4-unit)	—	—	—	Pullman Std.
Union Pacific	30	Airslide cov. hopper	100	May	3rd qtr.	General American
	10	RD hopper	100	June	4th qtr.	Ortner
	375	Gondola	100	Oct.	1st qtr. '82	Co. Shops
	25	Airslide cov. hopper	100	Oct.	1st qtr. '82	General American
Various Industrial	336	Cov. hopper	100	1981	1981	Thrall
	20	Cov. hopper	100	1981	1982	Thrall
	304	Gondola	100	1981	1981	Thrall
	40	Gondola	50	July	Nov.	Thrall
	60	Woodchip	100	July	Nov.	Thrall
	6	GT gondola	100	Jan.	Mar.	ACF
	252	Tank	—	—	—	ACF
	1,740	Cov. hopper	100	—	—	ACF
	200	Hopper	100	Nov.	1982	Evans
	403	Cov. hopper	70	May	1982	Berwick
Vulcan Materials Co.	20	Tank	100	July	4th qtr.	General American

1981 DOMESTIC LOCOMOTIVE ORDERS

Purchaser	No.	Type	Horsepower	Order Date	Delivery Date	Builder
Amtrak	30	B-B	3,000	—	—	EMD
	24	Electric	7,000	—	—	EMD
Armco	4	B-B	1,000	—	—	EMD
Atchison, Topeka & Santa Fe	30	C-C	3,000	Jan.	May-July	GE
	23	C-C	3,000	June	Nov.-Dec.	EMD
Chicago South Shore	10	B-B	2,000	—	—	EMD
Corinth & Counce	1	B-B	1,000	—	—	EMD
Curtis Milburn & Eastern	4	B-B	2,000	—	—	EMD
Eastman Kodak	1	B-B	1,500	—	—	EMD
Family Lines	32	B-B	3,000	Mar.	Nov.	EMD
	25	C-C	3,000	Mar.	Dec.	GE
Georgetown	1	B-B	1,000	—	—	EMD
Kennecott Minerals	2	B-B	2,300	—	—	EMD
Missouri-Kansas-Texas	8	C-C	3,000	Feb.	Dec.	EMD
Missouri Pacific	55	B-B	3,300	Oct.*	Dec.	GE
	70	B-B	1,500	Sept.	Jan. '82	EMD
Mobil Oil	1	B-B	1,500	—	—	EMD
New Jersey DOT	17	B-B	3,000	—	—	EMD
Norfolk & Western	6	—	3,600	—	Apr.-May	GE
Phelps Dodge	1	B-B	2,300	—	—	EMD
Southern	22	B-B	3,000	Sept.	2nd qtr. '82	GE
	42	B-B	1,500	Sept.	2nd qtr. '82	EMD

1981 EXPORT LOCOMOTIVE ORDERS

Purchaser	No.	Type	Horsepower	Order Date	Delivery Date	Builder
Angola	12	C-C	2,000	—	1982	GE
CSN-Brazil	3	C-C	1,000	—	1982	GE
Mexico	48	C-C	3,000	—	'81-'82	GE
	22	B-B	2,250	—	'81-'82	GE
Mexico (Industrial Mineral)	1	B-B	1,500	June	Dec.	EMD
Mexico (Sonora Baja)	1	B-B	3,000	Mar.	July	EMD
Mexico (Sureste)	3	B-B	2,000	May	Aug.	EMD
Saudi Government Rys.	5	B-B	1,000	Apr.	Nov.	EMD
	6	C-C	3,500	Apr.	Dec.	EMD
Taiwan	5	C-C	4,200 (elec.)	—	1981	GE
Tunisia	31	B-B	1,000	—	1982	GE
	20	C-C	2,200	—	1982	GE
Venezuela	4	B-B	1,500	Nov.	Apr. '82	EMD
Zimbabwe	25	C-C	2,250	May	Nov.-Dec.	EMD
	4	C-C	2,250	Sept.	Feb.-Mar. '82	EMD

Market

CARLOADINGS

Loadings of revenue freight in the week ended Jan. 9 totaled 360,717 cars, according to the Association of American Railroads. This was a decrease of 51,945 cars, or 12.6%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended Jan. 9 are estimated at 15.4 billion, a decrease of 11.7% below the corresponding week of 1981.

REVENUE FREIGHT CARLOADINGS

Commodity	Jan. 9 week	Jan. 9 week
Grain	21,911	18,720
Other farm products	4,378	4,399
Metallic ores	20,393	18,841
Coal	114,658	93,265
Crushed stone, gravel & sand	8,200	5,670
Nonmetallic minerals	11,442	8,552
Grain mill products	12,859	10,289
Food and kindred products	13,822	11,009
Primary forest products	16,221	10,801
Lumber & wood products (except furniture)	4,599	3,876
Pulp, paper & allied products	16,086	11,929
Chemicals & allied products	23,439	22,052
Petroleum products	5,196	4,318
Stone, clay & glass products	9,729	8,358
Coke	5,296	4,486
Metals & products	11,625	9,736
Motor vehicles & equipment	8,600	4,578
Waste & scrap materials	8,327	5,599
Forwarder & shipping assn. traffic	7,019	26,724
All other carloads	36,768	26,724
LCL traffic	149	134
Total cars loaded	**360,717**	**288,781**
Cumulative total, 2 weeks	**649,484**	**751,051**
Estimated revenue ton-miles (billions), 2 weeks	**28.1**	**31.8**

PIGGYBACK LOADINGS

U.S. piggyback loadings for the holiday week ended Jan. 2 totaled 23,390 cars (14.0% above the corresponding 1981 week) and 41,920 trailers and containers (up 13.2% from 1981).

• *Birmingham Southern.*—1982 improvement program will include acquisition of 65 new freight cars, lease of five locomotives, and expenditure of more than $260,000 for yard-office and yard-lighting improvements.

• *Burlington Northern.*—1982 fixed-plant program will include installation of new and relay rail on nearly 1,100 miles of line and acquisition of roadway and track machines costing about $17 million (or three times what BN spent for such equipment in 1981); in addition, BN will spend $10 million for shop improvements, new machinery and tools. Major roadway projects will include rehabilitation of 47 miles of former Milwaukee Road line to reduce grades for trains operating between Yakima and Auburn, Wash.; completion of a new double-track line near Belmont, Neb., to reduce curvature and bypass a tunnel; the beginning of work to replace three 250-foot truss spans on a bridge over the Columbia River at Pasco, Wash.; and installation of ctc between Lincoln, Neb., and Napier, Mo., this project to be completed in 1983.

• *Chicago & North Western.*—Major fixed-plant improvements for 1982 will include installation of about 260 miles of cwr at a cost of $33.3 million; installation of crossties and ballast and grading, $21.4 million; acquisition of 71.5 miles of former Milwaukee Road and Rock Island right-of-way, $4.8 million; construction of additional yard facilities, including new intermodal facilities at Butler, Wis., $2.3 million; installation of ctc between South Pekin and Pottstown, Ill., $2.1 million; extension of microwave between Nagel Park, Minn., and Kansas City, $1.3 million; and acquisition of roadway machines and other work equipment, $11.2 million.

• *Norfolk & Western.*—Major 1982 fixed-plant improvement programs will be: Rail and ballast program, $11,959,000; construction of intermodal facilities, Landers Yard, Chicago, $8,622,000; development and installation of a mechanized accounting system for diesel fuel that will provide physical and accounting controls for receipt, storage and issue for all locomotive fuel at 18 locations, $2,557,000; installation of track, turnout, overhead bridges and traffic controls on a connection with Southern at Altavista/Hurt, Va., $2,792,000; installation of a new coal-sampling system on two conveyor belts at Pier 6, Norfolk, $1,640,000; installation of hydraulic retarders to replace inert retarders at Bellevue, Ohio, Yard, $3,635,000; installation of automatic grade-crossing-protection devices, participation in grade-crossing-separation projects and installation of prefabricated crossing surfaces at a number of system points, $1,700,000; and acquisition of shop and storehouse machinery at various points, $3,094,000.